Clarifying and Enforcing the Nuclear Rules

Testimony by

Henry Sokolski
Executive Director
The Nonproliferation Policy Education Center
1718 M Street NW, Suite 244
Washington, DC20036
npec@npec-web.org

www.npec-web.org

Presented Before a Hearing of
The U.S. House of Representatives, Committee on Government Reform
Subcommittee on National Security, Emerging Threats, and International Relations
"Weapons of Mass Destruction: Current Nuclear Proliferation Challenges"

2154 RHOB
2:00 P.M.
September 26, 2006

Mr. Chairman, ranking member, members of the committee, I want to thank you for inviting me here to testify on the Nuclear Nonproliferation Treaty (NPT), and on how to improve implementation of the NPT and the International Atomic Energy Agency's (IAEA's) nuclear safeguards system. I previously worked on these matters in the U.S. Senate as a legislative aide, in the Pentagon as the Deputy for Nonproliferation Policy under Secretary Cheney, and as an analyst in the Secretary of Defense's Office of Net Assessment. I currently run a nonprofit educational organization, the Nonproliferation Policy Education Center, which is completing two independent studies on how implementation of the IAEA's safeguards system and the NPT can be improved.

Your hearing today is, unfortunately, all too timely. The nonproliferation provisions of the NPT and the IAEA have long been watered down and overshadowed by too many countries' backing of the most dangerous and uneconomical forms of nuclear energy. What's worse, since the early 1990s, we and our allies have shied away from enforcing the NPT or the IAEA against the world's worst proliferators. In Iran's case, we have decided to focus instead on enforcing a voluntary, confidence-building political understanding Iran made with France, the U.K. and Germany. With North Korea, we deferred enforcing the NPT for nearly a decade and then in 2003 actually ignored the IAEA's formal referral of Pyongyang's NPT violations to the UN Security Council. Finally, in the case of India, we and our allies are making an enormous exception, which failing an unprecedented expression of nuclear self-restrain by India, risks all but vitiating the nonproliferation utility of the NPT and IAEA.

Sadly, there is no technical or diplomatic substitute for these treaty-based systems. That's why my center has been commissioning research on how to make the nonproliferation provisions of the NPT and the IAEA more effective. Today, I would like briefly to discuss four of the key findings of the research that's been done.

(1) ***We need to clarify what the NPT protects as being "peaceful."*** A key reason why the nonproliferation provisions of the NPT have become more difficult to enforce is that most nations – including Iran, North Korea, *and* the United States – have adopted too generous a view of the "inalienable right" to develop, research and produce "peaceful nuclear energy" that the NPT is meant to protect. Simply because a nuclear activity or material might have some conceivable civilian application and a country is willing to let international inspectors to monitor them occasionally is not enough. The nuclear activity or material must also be capable of being monitored in a manner that will prevent it from being used for bombs, and their applications must be economical enough to be clearly "beneficial." Certainly, building commercial nuclear fuel making plants, which can bring nations to the brink of having bombs, is hardly a *per se* right under the NPT. Indeed, such a reading of the NPT would make it a treaty that promotes the spread of nuclear weapons-making capabilities--the precise opposite of the treaty's intention.[1]

(2) ***The IAEA should concede what it can't safeguard and seek more funds to safeguard what it can.*** The ability of the IAEA to account for nuclear materials that are needed to make nuclear weapons is hampered not only by a lack of candor regarding the agency's inability to safeguard nuclear fuel-making activities, but also by a general tendency to rationalize away new safeguards and physical security challenges, and an unwillingness to raise the funds needed to meet these new challenges. For the last 20 years the agency's safeguards budget has little more than doubled in constant dollars (to about $105 million in 2004). During the same period, however, civilian stockpiles of separated plutonium and highly enriched uranium—which the agency is obligated to

safeguard because they are the most usable nuclear materials for making nuclear weapons, and can be fashioned into bombs in a matter of days—have increased six times over.[2] The actual amount of civilian nuclear weapons-usable material that goes unaccounted for each year, meanwhile, has been increasing steadily as the number and output of nuclear fuel-making facilities grows. If we are serious about safeguarding against the spread of nuclear weapons and preventing nuclear theft or terrorism, these trends must change. The IAEA may be able to monitor nuclear fuel-making in rough terms, but it cannot inspect these facilities to provide timely warning of diversions or thefts equivalent to many nuclear weapons. It should admit this publicly. This would help put a spotlight on the dangers associated with additional governments trying to create even more nuclear fuel-making plants than already exist.[3] At the same time, technical opportunities to improve material accountancy coverage for reactors and inspection coverage exist, and deserve to be funded beyond the current levels.[4] The agency also could do more to encourage tighter physical security and better controls on uranium source materials. For all of these needed upgrades, the existing system of country assessments to fund the IAEA's budget, a system based on the UN formula and each country's GDP, is simply inadequate.[5] It needs to be complemented with a user-fee based on the size of each country's nuclear program and inspection requirements.

(3) ***Governments must put security ahead of subsidizing uneconomical, dangerous nuclear energy projects.*** Concern for nuclear security has increasingly taken a backseat to states' encouragement of uneconomical nuclear energy projects that can bring countries within weeks or days of acquiring nuclear weapons. For example, Japan, which was already rocked by revelations that its commercial plutonium fuel-making authorities had lost track of roughly 40 bombs worth of nuclear weapons usable material, began operations of one of the world's largest reprocessing plants at Rokkasho-mura this year. This plant is certain to lose money and experts project that the IAEA will lose track of nearly 50 crude bombs' worth of weapons usable plutonium there annually.[6] Other equally problematic nuclear fuel-making operations are underway or planned in Brazil, South Africa, India, Ukraine, and Argentina. One has to wonder why: The IAEA has correctly established that there is no economic requirement for additional nuclear fuel-making capacity for next 10 to 20 years.[7] Yet, the US is doing little to object to these efforts, and arguably is encouraging countries to pursue them in order to become "nuclear fuel supplying states" under the U.S. Department of Energy's Global Nuclear Energy Partnership.[8] Here, it would help to pace nuclear power's expansion and that of commercial nuclear fuel-making more with what private financial institutions are willing to fund than with what governments are willing to subsidize.

(4) ***We need to do more to enforce the rules and do so in a country-neutral fashion.*** Finally, no nuclear nonproliferation rules can long survive if violators go unidentified and unpunished, and if states that never signed up or never followed the rules are treated as though they had. At the very least, North Korea should be held responsible for its violation of the NPT and its IAEA safeguards agreement, even though it withdrew from the NPT. In addition, Iran should be sanctioned not just for its failure to adhere to the one-off, voluntary, confidence-building political understanding it reached with the U.K., France, and Germany in November of 2004, but also for its clear violations of its IAEA safeguards obligations that it assumed by joining the NPT. Also, it is critical that the U.S. and other states not grant India the benefits of being an NPT member in good standing (India never signed the treaty) unless New Delhi is at least willing to restrict its military nuclear efforts. India could do this by restricting its weapons production efforts, as all NPT nuclear weapons states already have, or at least by not expanding its nuclear weapons material production efforts beyond its current level. This is not only needed to prevent an arms rivalry in the region (and beyond), but to

keep the U.S. and other civilian nuclear suppliers of India compliant with their NPT obligation not to help any nation that did not have nuclear weapons before 1967 get nuclear arms "directly or indirectly". Finally, the U.S. and other countries should back adoption of new country-neutral rules similar to those being promoted by the French Government. These new rules would prescribe minimum sanctions for violations in advance (without ever naming specific states). They also would shift much of the current burden of proof in determining NPT and IAEA violations (and for taking appropriate enforcement actions) from the IAEA's Board of Governors, where it now lies entirely, to the suspect nations themselves. Instead of requiring the IAEA board to prove a violation before taking action, these new rules would suspend nuclear cooperation if the board were unable to find a nation clearly to be in compliance. Similarly, minimum sanctions would be imposed automatically against states that the IAEA board found to be in violation.[9]

Endnotes

1. On these points, see Albert Wohlstetter, "Spreading the Bomb without Quite Breaking the Rules," *Foreign Policy*, No. 25 (Winter 1976-77); Arthur Steiner, "Article IV and the 'Straightforward Bargain'," PAN Heuristics Paper 78-832-08, in Wohlstetter, et al., *Towards a New Consensus on Nuclear Technology*, Vol. II (Supporting Papers), ACDA Report no. PH-78-04-832-33 (Marina del Rey, CA: Pan Heuristics, 1978), pp. 1-8; Eldon V.C. Greenberg, *The NPT and Plutonium: Application of NPT Prohibitions to 'Civilian' Nuclear Equipment, Technology and Materials Associated with Reprocessing and Plutonium Use* (Washington, DC: The Nuclear Control Institute, 1993) <available at http://www.npec-web.org/Frameset.asp?PageType=Writings>; and Henry Sokolski, "The Nuclear Nonproliferation Treaty and Peaceful Nuclear Energy," Testimony before *Assessing "Rights" under the Nuclear Nonproliferation Treaty*, a hearing of the U.S. House of Representatives, Committee on International Relations, Subcommittee on International Terrorism and Nonproliferation, March 2, 2006 <available at http://www.npec-web.org/Frameset.asp?PageType=Single&PDFFile=060301Testimony%20House%20IRC%20-%20NPT%20Rights&PDFFolder=Testimonies>.

2. See Table 1 below, which reflects the growth of safeguarded nuclear material in NPT non-nuclear-weapons states that is of direct use for making nuclear weapons.

The IAEA Safeguards Budget, and Safeguarded Weapons-Usable Nuclear Materials

	As of 1984	As of 2004
IAEA Safeguards Budget Obligation (In Constant Fiscal Year 2004 U.S. Dollars)	$45.7 million	$104.9 million
Separated Plutonium (Pu) Outside Reactor Cores	7.7 tonnes	89.0 tonnes
Highly Enriched Uranium (HEU)	11.8 tonnes	32.0 tonnes
Total IAEA Safeguarded Weapons-Usable Nuclear Materials	19.5 tonnes	121.0 tonnes

Data Sources: For data on the IAEA's safeguards budget obligation in current—not constant—U.S. dollars, *see The Agency's Accounts for 1984*, GC(XXIX)/749, p. 26; and *The Agency's Accounts for 2004*, GC(49)/7, p. 47. For data on the amount of nuclear material safeguarded by the IAEA, *see Annual Report for 1984*, GC(XXIX)/748 (Vienna, Austria: IAEA, July 1985), p. 63; and *Annual Report for 2004*, GC(49)/5, Annex, Table A19.

Prepared by R.B. Zarate, Research Fellow, Nonproliferation Policy Education Center, September 2006.

3. On these points, see Dr. Edwin S. Lyman, "Can Nuclear Fuel Production in Iran and Elsewhere Be Safeguarded Against Diversion?," a paper presented at the NPEC/King's College London conference, *After Iran: Safeguarding Peaceful Nuclear Energy*, October 2-3, 2005, London, UK <available at http://www.npec-web.org/Frameset.asp?PageType=Writings>.

[4] The IAEA, for example, still does not know whether most of its monitoring cameras are even on. This is a serious shortcoming. Over the last six years, the agency has learned of camera "blackouts" that lasted for "more than 30 hours" on 12 separate occasions. What's worse, it only learned of these blackouts after inspectors went to the sites and downloaded the camera recordings, as they are required to do every 90 days. Under new proposed "integrated safeguards" procedures, such downloading would occur only every 13 months—a period within which a state could conceivably make a nuclear weapon unbeknownst to the IAEA. The IAEA staff recently proposed to correct this inspections gap by accelerating implementation of near real-time monitoring using satellite communication connections. This effort, though, is being implemented at an excruciatingly slow pace due to a lack of funds. *See* J. Whichello, J. Regula, K. Tolk, and M. Hug, "A Secure Global Communications Network for IAEA Safeguards and IEC Applications," IAEA User Requirements Document, May 6, 2005. In addition, the IAEA still lacks a contingency fund (of $10 million to $30 million) needed to exercise its right under the Additional Protocol to conduct wide-area surveillance of countries, such as Iran, using remote sampling technologies that are currently available. See Garry Dillon, "Wide Area Environmental Sampling in Iran" a paper presented at the NPEC/King's College London conference, *After Iran: Safeguarding Peaceful Nuclear Energy*, October 2-3, 2005, London, UK <available at http://www.npec-web.org/Frameset.asp?PageType=Writings>. On other gaps that additional funding to the IAEA's safeguards system could fix, see the United States Government Accountability Office, "Nuclear Nonproliferation: IAEA Has Strengthened Its Safeguards and Nuclear Security Programs, but Weaknesses Need to be Addressed," October 2005, GAO-06-93.

5. There are two good reasons to reform how IAEA safeguards funds are raised. First, the current system is unfair: Italy, a nation that has no power reactors, pays more into the system than South Korea, which has 18 power plants. Second, the size of the IAEA budget bares no relation to other post-9/11 security efforts. For example, the U.S. Transportation Security Agency has a budget in excess of $6 billion dollars annually to screen U.S. air passengers; it tolerates a false-alarm rate in its screening of nearly 100 percent. In contrast, the IAEA, which is responsible for preventing relatively small diversions to make nuclear bombs from hundreds of thousands tons of civilian nuclear material which it safeguards, has an annual safeguards budget of only $130 million and is legally constrained against doing any inspection if it might produce a false-alarm rate more than 5 percent of the time.

6. On these points, *see* Bayan Rahman, "Japan 'Loses' 206 kg of Plutonium," *Financial Times*, January 28, 2003 <available at http://news.ft.com;servlet/ContentServer?pagename=FT.com/StoryFT/FullStory&c=StoryFT&cid=1042491288304&p=10112571727095>; and Nuclear Control Institute, "Enormous 'Plutonium Gap' at Japan's Tokai Plant Highlights Proliferation Risks of Reprocessing," January 28, 2003 <available at http://www.nci.org/03NCI/01/pr12803.htm>.

7. For projections, *see* International Atomic Energy Commission, *Multilateral Approaches to the Nuclear Fuel Cycle*, INFCIR/640, February 22, 2005, p. 51.

8. On these points, *see* Matthew Bunn, "Assessing the Benefits, Costs, and Risks of Near-Term Reprocessing and Alternatives," testimony presented before the U.S. Senate, Committee on Appropriations, Subcommittee on Energy and Water, September 18, 2006 <available at http://appropriations.senate.gov/hearmarkups/bunn-gnep-testimony.mht>; Edwin Lyman, "The Global Nuclear Energy Partnership: Will It Advance Nonproliferation or Undermine It?" presented at the annual meeting of the Institute of Nuclear Materials Management, July 19, 2006 <available at http://www.npec-web.org/Frameset.asp?PageType=Single&PDFFile=20060700-Lyman-GNEP&PDFFolder=Essays>; and

Steve Fetter and Frank N. von Hippel, "Is U.S. Reprocessing Worth the Risk?", *Arms Control Today*, September 2005 <available at http://www.armscontrol.org/act/2005_09/Fetter-VonHippel.asp>.

9. On these points, *see* Government of France, "Strengthening the Nuclear Non-Proliferation Regime," a working paper submitted by France to the Preparatory Committee for the 2005 Review Conference to the Parties to the Treaty on the Non-proliferation of Nuclear Weapons, NPT/CONF.2005/PC.III/WP.22, May 4, 2004 <available at http://www.npec-web.org/Frameset.asp?PageType=Single&PDFFile=NonPaper040504%20UN-%20France%20-%20NPT-%20English%20Version&PDFFolder=Presentations>; Henry Sokolski, "When Clever Gets Dumb: Washington's Iran Deal Is An Exercise in Futility," Na*tional Review Online*, July 20, 2006 <available at http://www.npec-web.org/Frameset.asp?PageType=Single&PDFFile=20060817-Sokolski-NRO-WhenCleverGets&PDFFolder=OpEds>; Pierre Goldschmidt, "The Nuclear Non-proliferation Regime: Avoiding the Void," a paper presented at an NPEC seminar, February 28, 2006 <available at http://www.npec-web.org/Frameset.asp?PageType=Projects>; and *Letter to Congress on the Dangers that the U.S. Might Violate the NPT in Aiding India's Civilian Program*, June 20, 2006 <available at http://www.npec-web.org/Frameset.asp?PageType=Single&PDFFile=20060620-LetterOnArticleOne&PDFFolder=Essays>.